# 8. REHABILITATION ASSISTANCE

The purpose of this chapter is to provide information on the rehabilitation assistance that the U.S. Army Corps of Engineers can provide if an FCW is damaged during a flood. It describes the criteria that must be met before this assistance can be given, as well as the process for requesting it and the types of activities to which this assistance can be applied. Although the rehabilitation assistance described in this chapter can only be given to those FCWs with Active status in the RIP, Chapter 9 lists additional types of emergency assistance the Corps can provide regardless of your participation or status in the RIP.

# 8.1 Requesting Rehabilitation Assistance

In the event of a significant flood, the Army Corps of Engineers District Commander will declare the flood an emergency. Immediately after the declared flood subsides (when the river goes back down to its bank full condition and is not predicted to rise again), the Corps district will issue a "Notice to Public Sponsors," which lets you, as the public sponsor, know that the Corps is accepting requests for rehabilitation. If your project was damaged during the flood, you'll typically be given 30 days to respond to this notification and submit a formal, written request for rehabilitation assistance. A sample request form can be found in Appendix E.

# 8.2 Requirements for Receiving Rehabilitation Assistance

Upon receipt of your request, the Corps will first determine whether the repairs would be eligible for rehabilitation assistance. There are a number of requirements that must be met before the Corps will provide this assistance:

## a. The FCW must have an Active status in the RIP.

# b. The FCW must have been damaged by a flood or coastal storm

Damages by non-flood events, regardless of whether they are natural or man-made, are generally not eligible for Corps assistance under the RIP.

## c. Cost / Benefit Calculation

To determine whether the cost of the repair is economically justified, the Corps will calculate the benefits and the costs of the repair using standard principles and guidelines for water resource projects. The calculated benefits will be based on the benefits to the entire area protected by the complete (hydrologically independent) flood control system, and the calculated repair costs will reflect the flood damages along the complete flood control system. To qualify for rehabilitation assistance, the benefits of the repair must outweigh the cost.

# d. Construction Cost Minimum Requirement

The construction cost of the repair must be more than \$15,000. There are several reasons for this policy. First, damages under \$15,000 are considered to be routine maintenance that the public sponsor must undertake at its own expense. Second, before the Corps can undertake any project, specialists from many different disciplines must review the project. These specialists ensure that real estate and rights-of-way are

available, review environmental and endangered species considerations, and verify that the Corps is legally and financially correct in undertaking the repair. This work must be done regardless of how big or small the job is. Because of the considerable cost of undertaking this background work, small repair jobs simply don't justify all of the work needed for Corps involvement.

# **8.3** Cooperation Agreements

If these qualifications are met, then a cooperation agreement will be prepared. The cooperation agreement is a contract between you, as the public sponsor, and the Corps. It clarifies the details of the rehabilitation, including the specific work to be done, and sponsor requirements of cost sharing and local cooperation. The Corps will prepare this document following the format in Appendix F. The sponsor and the District Engineer must sign the cooperation agreement before the rehabilitation can begin, and there could be additional costs involved if it takes more than 30 days for you to sign the document once it's complete.

The cooperation agreement outlines the cost breakdown for the work. The following sections outline the types of items that will typically be paid for by the US government, the items that are typically cost shared, and the items that you would usually be responsible for at 100 % local cost. Keep in mind that this isn't a complete list, and that certain details have been omitted for brevity. Specific details concerning the cooperation agreement can be found in paragraph 5-10 of ER 500-1-1 and in paragraph 5-13 of EP 500-1-1.

# a. Rehabilitation components typically covered at 100% Federal cost

The Corps will fund, at 100% federal cost, costs associated with the preparation and approval of Preliminary Investigation Reports, as well as the engineering and design costs for approved projects.

# b. Items typically cost shared at 80% Federal and 20% Local cost

Cost sharable items include construction costs, contingency costs for construction, and supervision and administration (S&A) costs.

There are several details you should know about your 20% local cost share contribution. Most importantly, it may be a combination of cash or work in kind. The value of work in kind is determined by the Corps as the estimated cost that the Corps would have to pay if it was to perform or contract for the same work. (Be aware that the Corps won't reimburse you for work in kind that you contribute beyond your 20% requirements.) Also, cash contributions could potentially include funds from other federal agencies, as long as the other agency confirms in writing that their money can legally be spent on the rehabilitation.

# c. Items you are responsible for at 100% local cost

These items do not constitute credit towards your 20% local cost share, but are additional costs for which you will be responsible.

#### i. LERRDs

All suitable Lands, Easements and Rights-of-way, including borrow and dredge material disposal areas, and relocations (e.g., roadways, utilities, etc.) that are necessary to perform the required repairs and to secure the necessary permits.

#### ii. Betterments

Any construction effort that increases the protected area, provides features that did not exist prior to the flood event, or increases the degree or level of protection provided by the FCW are considered betterments, and are not eligible for funding under the RIP. Examples of betterments might include increasing the height of a levee, or the placement of riprap where none previously existed. Repairs that incorporate modern materials or technologies commonly incorporated into current designs (for example, the use of geotextile fabric) are not considered betterments and may be cost shared as part of the rehabilitation work.

#### iii. Deliberate Levee Cuts

Rehabilitation assistance will generally not be provided for the repair of levees that were deliberately breached by the public sponsor. For example, as river levels begin to recede after a flood, a public sponsor may wish to intentionally breach the levee in order to let out ponded water. The repairs for this deliberate levee cut would not be eligible for rehabilitation assistance.

However, there may be cases when the Corps acknowledges a valid need for a deliberate levee cut in order to protect the integrity of the levee (or adjacent levee system) and minimize overall damages from a flood. If you consult with the Corps before making a deliberate levee cut and the Corps specifically approves the cut, then an exception would be made to the above policy and rehabilitation assistance could be provided to repair the breach.

# iv. Repairs that wouldn't be the least cost alternative to the Federal Government

If you prefer an alternative method of repair that is not the least cost alternative, you are responsible for paying 100% of the cost difference between the two alternatives. For example, the transportation of borrow material from the closest acceptable borrow source (as determined by the Corps) is a cost sharable item (80/20). However, if you wanted to use borrow material from a further source, then you're responsible for paying for 100% of the transportation costs beyond what would have been incurred, had you opted for the closer source.

## v. Maintenance Deficiencies

If maintenance deficiencies are noted during a routine inspection, and your project is rated "Minimally Acceptable," you will be given a period of time to make the repairs. If the maintenance is still outstanding when there is a flood, you are still responsible for 100% of the cost of this deferred maintenance. The maintenance repairs must be completed either prior to or concurrently with any approved project rehabilitation. It may be possible to have the Corps make the repairs along with the project rehabilitation, but the cost associated with the deferred maintenance is still your responsibility, and will be added to your 20% cost-share for the rehabilitation. To clarify this issue, here are two examples of deferred maintenance that would be the responsibility of the public sponsor:

# **Deferred Maintenance Example 1: Flap Gate Requires Maintenance**

During a CEI, it was found that a flap gate for a culvert was not closing properly and required maintenance. After the CEI and before the public sponsor fixed the problem, there was a flood. Because the flap gate didn't close properly, the levee around the culvert was eroded, necessitating earthwork and a new culvert. The public sponsor will be responsible for 100% of the cost of repairing the flap gate. Depending on the circumstances and the actions the local sponsor had taken to repair the flap gate and reduce the amount of flood damage, the sponsor may be responsible for replacing the culvert and the damage to the levee as well.

# **Deferred Maintenance Example 2: Rusted Metal Pipe**

A corrugated metal pipe runs through the levee. Over time, it has rusted significantly, and is in danger of failure. It's noted in a CEI that the pipe needs to be replaced. Even though the repair of the pipe would be a large expense, this type of repair is considered to be part of regular maintenance and is the sponsor's responsibility. If the pipe collapses and causes the levee to fail at this location during a flood, the sponsor is not only responsible for the cost of a new pipe and installation, but also for the complete cost of repair to the surrounding levee. (If the pipe fails but the levee failure was unrelated to the rusted pipe, then the Corps may assist with the repairs, but the sponsor would still be responsible for replacing and installing a new pipe.)

# 8.4 Nonstructural Alternatives to Rehabilitation

If your FCW is damaged in a flood and is eligible for rehabilitation assistance, the project could be repaired as previously discussed, or you could request a Nonstructural Alternative Project (NSAP) in lieu of the structural repair. This option essentially allows you to use the federal funding that would have been authorized to rehabilitate your flood control work, and apply it towards the restoration of the flood plains or floodways that were originally in your area. Because of this, you would typically only choose a nonstructural alternative (NSA) once you were absolutely sure that you no longer wanted to rely on your FCW to protect you from floods. Some of the things an NSA might fund include the acquisition of land for the project, the removal of utility connections and other structures, the total or partial removal of levee reaches, and the restoration of natural habitats. If you're thinking of requesting an NSA, remember that the Corps may, in its sole discretion, reject a request for an NSA if it believes that the project would lead to significantly increased flood protection expenses, would negatively impact adjacent or nearby FCWs, or would lead to increased risk to life or property during flood events. Once an NSAP is implemented, the project is no longer eligible for rehabilitation assistance because it will no longer be functioning as a flood control project.